



# PROPOSED CHANGE ORDER REQUEST

*Department of Watershed Management*

Contract Name: Design Build Services for the Gravity Sewer System Rehabilitation, Replacement & Construction - Package No. 2 Date: 1/12/2021

Contractor: Granite Inliner, LLC

Contract Number: 1081070 Contract Amendment Number: 2

Contract Amendment Category:  Cost  Schedule  Scope  Deliverables

Original Contract \$ Amount:	Contract Start Date:	Original Contract Time:(TERM)	Original Contract End Date
\$26,892,824.98	12/17/2017	1110	12/31/2020

NTP Start Date:	Original Performance Days:(TIME)	Original Performance End Date:
1/11/2018	891	6/20/2020

Previous Change Order:	Previous Time Extensions (Days):	Previous Changes to \$ Amount:
Change Order No. 1:	195	\$0.00
Change Order No. 2:	0	\$0.00
Change Order No. 3:	0	\$0.00

Current Contract Amount:	Current Performance Time (Days):	Current Performance End Date:	Current Contract End Date:
\$26,892,824.98	1086	12/31/2020	6/30/2021

**Description of Proposed Changes:** Amendment/Change Order No. 2 is proposed to add budget to complete additional scope changes due to recently increased sewer capacity requirements in several areas after the contract was awarded; and to accommodate sewer system realignments due to easements acquisition negotiations. The time extension will permit the contractor additional time to complete work associated with the changes in the Design Build Services for the Gravity Sewer system Rehabilitation, Replacement and Construction Pkg No. 2. project.

**Justification of Proposed Changes:** See attached justification including summary of cost changes for each project and new agreement with contractor.

Proposed Additional Performance Days:	Proposed Cumulative Performance Days:	Proposed Performance End Date:	Proposed Contract End Date:
365	1451	12/31/2021	6/30/2022
Proposed Changes to Dollar Amount:	Proposed Cumulative Contract Amount:		Amount Spent To Date as of (1/12/21):
\$4,022,536.05	\$30,915,361.03		\$20,878,537.81

**Describe Any Risk Associated With This Change:** There is no risk for the County if the change is approved.

**Effect of NOT Approving This Change:** The DWM will not be able to handle the additional capacity in the system from new mix- use developments coming on-line and from wet weather. This may cause major backup in the system. Additionally the contractor may submit legal claims because they have not stopped working to meet the schedule.

**Engineering Manager's Approval:**

- Accepted
- Rejected

Signature: Kerry Williams, P.E., PMP  
Print Name: Kerry Williams  
Date: January 12, 2021

Digitally signed by Kerry Williams, P.E., PMP  
DN: cn=Kerry Williams, P.E., PMP, o=DeKalb County, ou=DCMS, email=kerry.williams@dekalbcounty.ga.us  
Date: 2021.01.12 15:21:15 -0500

**Watershed Director's Approval:**

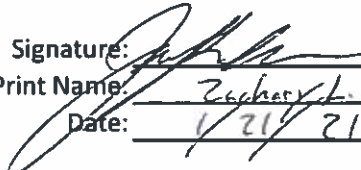
- Accepted
- Rejected

Signature: Carver Joseph  
Print Name: Carver Joseph, DWM Deputy Director ( for Reginald D. Wells)  
Date: 1/19/2021

Digitally signed by Carver Joseph  
Date: 2021.01.19 10:45:50 -0500

**Chief Operating Officer's Approval:**

- Accepted
- Rejected

Signature:   
Print Name: Zachary L. Williams  
Date: 1/21/21

Contract Name: Design Build Services for the Gravity Sewer System Rehabilitation, Replacement & Construction - Package No. 2

Contractor: Granite Inliner, LLC

Contract Number: 1081070

## CD2 Change Order description:

The proposed change order will include all remaining scope for CD Package 2 that was discussed in a meeting with Granite and it is \$2.8 M of owner-initiated changes due to updated sewer capacity requirements and sewer realignments for easement acquisition negotiations. Additionally, it includes \$350,000 for general allowance, \$350,000 for administrative cost beyond the original project schedule due to easement acquisition delays and finally \$500,000 for rock allowance due to recent rock finding on a realignment requested after the contract was awarded. The total Change order is about \$4 M. See cost description table for details.

### Justification for Change Order:

- 1- Underestimation of the required sewer capacity by the model. As we know when the contract was awarded the model only had dry weather data and as the season changed and more wet weather flows were incorporate to the model the required pipe diameters changed. These changes affected Project 2, 4, 5 and 6. In some cases as project 2 the change was only \$17,000. In other cases where the pipe had to be considerable upsized and the elevation and slopes changed, the rehabilitation method had to change from a low disturbance bursting to open cut and the additional cost was considerable high. In the case of project 6 additional exploration, rock excavation, and realignment design costs raised due to addition of 6 new segments to rehabilitate, the cost was estimated to a maximum of \$500,000 of rock allowance.
- 2- The new mixed-use developments in Malone Dr. connecting to the sanitary sewer system after the contract was awarded added an important realignment for project 5. It was necessary to use new expensive rehabilitation methods in areas with hard rock very difficult to dig such as Horizontal directional drilling and J&B. The hard field conditions were not predicted by the contractor since the scope was added after the contract was awarded.
- 3- The contract was awarded without the required Easements. Unfortunately, the easements acquisition for 16 properties in a highly commercial area and high-end residential area have been very hard to obtain. In some cases, as the property of the Wiest Family and Mr. Harrington and Ms. Rountree, the easement acquisition required a realignment of the sewer system in order to obtain an agreement with the owner, increasing construction and design costs.
- 4- Before we knew that the big changes due to model updates were required, we approved the tier 1 scope using \$1M savings from scope changes in project 9, as a result the CD package 2 will end up with 4,619 ft. of additionally rehabilitated pipe, from the assessed segments. Additional savings from projects 3, 6, 12 and 16 were used to compensate the additional scope but it is not enough this is why the CO is required. See cost description table.

The following table includes a description of changes with its justification and the additional linear ft. for each project.

### Cost Description Table:

Project	GMP Total	Owner Initiated Changes, (savings)	Revised Total	NOTES	Additional Linear feet rehabilitated
Design	\$ 1,354,951.80		\$ 1,354,951.80		
1	\$ 193,856.66	\$ 10,973.00	\$ 204,829.66	Segment originally assigned as point was changed to PR+CIPP. 1 assessed segment of Tier 1 was added to CIPP.	344

2	\$ 448,351.74	\$ 17,055.92	\$ 465,407.66	Two segments upsized from 10 in. to 12 in. to accommodate capacity after contract was awarded. 3 assessed segments Tier 1 were added for CIPP.	497
3	\$ 452,000.00	\$ (42,480.93)	\$ 409,519.07	Cost reduction since open cut was changed to CIPP with Point Repair. 2 assessed segments Tier 1 were added for CIPP	196
4	\$ 6,500,000.00	\$ 1,678,976.88	\$ 8,178,976.88	Resident complaints about road conditions resulted in increasing milling and paving quantity to pave curb to curb instead of just a patch repair. 2 segments were increased from 16 in. to 24 in. to accommodate capacity. Additional unforeseen items added realignments such as easement acquisition negotiations with Kaiser Harrington.	
5	\$ 6,971,505.94	\$ 4,467,933.20	\$ 11,439,439.14	After the contract was awarded it was required to reroute several sewer segments to accommodate additional capacity from two large mixed-use developments. Additional changes were necessary due to easement acquisition negotiations particularly with the Wiest Family that led to a new realignment and unforeseen hard rock under a parking deck. The last Bubbling Creek upsized from 16 in original scope to 20 in required new scope was a result to run the model again with new wet weather conditions and the new developments connecting downstream to the sewer system. Ms. Rountree also influenced on the new realignment in Bubbling Creek since it is very hard to negotiate any easement with her.	
6	\$ 2,110,281.54	\$ (168,683.63)	\$ 1,941,597.91	Cost reductions due to scope changed from open cut to J&B, 12 assessed segments Tier 1 were added for CIPP and open cut. Additionally, 6 pipe segments were added as a result to running the updated model and determining that the pipe needed to be upsized to accommodate capacity. This will add unknown rock excavation cost estimated to a maximum of \$500,000 allowance	2012
7	\$ 634,408.58	\$ -	\$ 634,408.58	No significant changed by Owner	
8	\$ 417,833.91	\$ -	\$ 417,833.91	No significant changed by Owner	
9	\$ 2,324,045.60	\$ -	\$ 2,324,045.60	Scope changes and reductions yielded \$1M that was assigned to assessment lines added (Tier 1) for assessment and rehabilitation to project 1, 2, 3, 6, 9, 13, 14 and 16. The net cost canceled out to no change. This was mutually agreed upon between Granite and DWM. 1 assessed segment of Tier 1 was added to PR + CIPP.	390
10	\$ 228,528.47	\$ -	\$ 228,528.47	No significant changed by Owner	
11	\$ 242,712.80	\$ -	\$ 242,712.80	No significant changed by Owner	
12	\$ 1,403,189.30	\$ (960,067.33)	\$ 443,121.97	Cost reduced for segments that will not require upsized from open cut to CIPP.	

13	\$ 149,883.05	\$ -	\$ 149,883.05	No significant changed by Owner. 2 assessed segments Tier 1 were added for CIPP	183
14	\$ 133,296.70	\$ -	\$ 133,296.70	No significant changed by Owner. 2 assessed segments Tier 1 were added for CIPP	466
15	\$ 234,474.11	\$ 5,327.06	\$ 239,801.17	An assigned point repair had to be increased in size	
16	\$ 2,593,504.79	\$ (2,186,498.11)	\$ 407,006.67	Cost reductions due to pilot program, several segments originally designated for open cut were changed to CIPP and some lines were removed from scope because they were already rehabbed with CIPP. 3 assessed segments Tier 1 were added for CIPP	531
Owner Controlled Rock Excavation Allowance		\$ 500,000.00	\$ 500,000.00	Recent discovered unforeseen hard rock near the creek buffer for project 6 and 5 for new added segments.	
Owner Controlled General Allowance	\$ 500,000.00	\$ 350,000.00	\$ 850,000.00		
CO Administration		\$ 350,000.00	\$ 350,000.00		
			\$ -		
<b>TOTAL</b>	<b>\$ 26,892,824.98</b>	<b>\$ 4,022,536.05</b>	<b>\$ 30,915,361.03</b>		<b>4619</b>

**New conditions mutually agreed with Granite for this Change Order:**

- 1- All the remaining scope of work for projects 4, 5 and 6 must be finished by Granite with the new additional change order \$4,022,536.05 for a new GMP of \$30,915,361.03. If the budget would be completely used Granite will have to finish the project at its own cost.
- 2- Lump sum of \$203,600 for bypass for all the 10 segments of the Bubbling Creek area for 120 days of operation, Assuming the remaining scope will be phased as follow:
  - a. Phase 1 will be all work (J&B and open cut) between 18-305-s086 and 18-305-s205. Bypass1 suction at 18-327-s081, discharge1 at 18-327-s205A. Bypass2 suction at 18-305-s087, discharge2 at 18-305-s081. Both bypasses will be removed after this construction work will be completed.
  - b. Phase 2 will be all work (HDD and open cut) between 18-306-s086 and 18-305-s086. Bypass3 suction at 18-305-s085, discharge at 18-305-s086A.

If any work is delayed for blasting permission (should it be necessary) or owner permissions, those delay days do not count toward the 120 total days.

- 3- A maximum amount of administrative costs of \$350,000 from the administrative costs allowance. The administrative costs are to be billed monthly and when the amount will be completely used Granite cannot bill any more administrative costs regardless of how long it takes to finish the project. DWM will not pay for administrative costs if there would be a delay for any utterly necessary blasting permission or homeowner permission to allow blasting in their property for project 5. If work in other projects is happening during owner delays on bubbling creek, administrative costs will apply until the allowance will be completely used.
- 4- Granite sub-contractor should be ready to begin construction within 4 weeks or less of obtaining all required easements.
- 5- Contract time extended to June 2022, total completion extended to December 2021 and substantial completion extended to October 2021.